

ABSTRACT OF THE DISCLOSURE

A system and method for remote diagnosis and predictive maintenance of devices, machines, and systems has been presented. The system detects signals of one or more operating and condition parameters and compares the detected signals to a signal model maintained locally with respect to the location of the device, machine, or system for anomalies. Information describing each anomaly is transmitted to a location remote from the device, machine, or system for diagnosis. The diagnosis includes an initial analysis of the information by diagnostic tools maintained at the remote location, a subsequent analysis of the information by diagnostic tools maintained elsewhere if the initial analysis fails to provide a diagnosis and a final analysis by a team of humans aided by a collaborative environment if the initial and subsequent analyses fails to provide a diagnosis. The diagnosis is transmitted to a maintenance service for repair of the device, machine, or system.